

REMARKS

In response to the Official Office Action dated June 7, 2004, claims 1, 14, 19, and 42 have been amended. Claims 44-51 have been cancelled. New claims 52 and 53 have been added. It is believed that the claims define patentable subject matter over the prior art made of record by the Examiner and reexamination of this application is therefore respectfully requested.

Independent claims 1 and 19 were originally rejected under 35 U.S.C. § 102 as being anticipated by Salonaho (WO 99/52310). Salonaho is similar to Applicants' invention in that both attempt to solve the problem of imbalance during soft handoff where the mobile station receives signals from each of the base stations at different powers. Salonaho solves this problem by modifying an outer loop power control mechanism. Salonaho defines a power correction interval (analogous to Applicants' power control interval) comprising a plurality of power adjustment intervals. At the beginning of each power correction interval, a base station controller supplies a target power to each of the base stations. The base stations use this target power to compute a power correction adjustment that is used to compute transmit powers during each power adjustment interval. It should be noted, however, that the power correction adjustment is fixed for the duration of the power control interval.

Applicants' claimed invention, in contrast, modifies the inner loop power control mechanism to achieve a similar result in a different way. In Applicants' claimed invention, the base station controller supplies a common reference power to the base stations. The common reference power is recomputed at a predetermined power control interval, which in the disclosed embodiment, equals one frame. The power control interval comprises a plurality of power adjustment intervals. During each power adjustment interval, the inner loop power control mechanism varies the step size of power adjustments, dependent upon a current transmit power of the base station and

the common reference power. Thus, in Applicants' claimed invention, the correction factor varies from one power adjustment interval to another.

The claims have been amended to incorporate the distinctions discussed above. In particular, independent claims 1 and 19 have been amended to explicitly define a power control interval comprising a plurality of power adjustment intervals. Further, the claim includes "varying a step size of the power adjustments during each of said plurality of power control groups as a function of the current transmit powers and the common reference power." Thus, according to the present invention, the variable adjustment is dependent upon the current power during each power adjustment interval and may vary from interval to interval. In contrast, as previously described, the correction factor in Salonaho is not based on the current transmit power during each power adjustment interval and is fixed for the duration of a power correction interval. Accordingly, it is believed that claims 1 and 19 define over the prior art made of record.

Dependent claims 14 and 42 have been amended to address the § 112 rejections, and claims 44-51 have been cancelled.

Claims 52 and 53 both recite "a variable adjustment factor" computed during each of a plurality of power adjustment intervals "as a function of the current transmit powers of the base stations and the common reference power." As noted in the discussion of claims 1 and 19, the prior art of record does not teach or suggest updating a variable power adjustment during a plurality of power adjustment intervals in a single power control interval. On the contrary, the prior art teaches a power correction factor that is fixed for all power adjustment intervals in a power correction interval. Accordingly, it is believed that claims 52 and 53 are allowable over the prior art made of record.

The present application is believed to be in condition for allowance and notice to
such effect is therefore respectfully requested.

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Respectfully submitted,

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